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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/604,631      | 08/06/2003  | Francis Zilka        | ZILKP012US          | 1630             |

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| EXAMINER |
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BEHREND, HARVEY E

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| ART UNIT | PAPER NUMBER |
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3641

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/604,631

Applicant(s)

ZILKA ET AL.

Examiner

Harvey E. Behrend

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12/2/04, 1/14/05, 1/31/05, 10/17/04.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 66-172 is/are pending in the application.
- 4a) Of the above claim(s) 139-172 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 66-136 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/31/05 and 10/17/04
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 3641

1. Newly submitted claims 137-172 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The newly presented invention of claims 137-172 and, the original presented invention, are independent and distinct, each from the other, with neither invention requiring all of the particulars of the other.

The originally presented invention requiring introducing the explosive material into a hot heat-exchange device using a tubular device freely positioned into the hot heat exchange device (a feature not found in the claims 137-172 of the newly presented invention).

The newly presented invention of claims 137-172 instead utilizes a cleaning delivery assembly to introduce an explosive into a hot heat exchange device and, then applies a force to position the cleaning delivery assembly at a desired position (all features not found in the claims of the originally presented invention).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 137-172 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 3641

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 66-136 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, for the reasons set forth in section 3 of the 6/3/04 Office action.

Additionally, there is no proper support in the original specification for the reference in claim 66 lines 10+, for the phrase, "said cooling non-destructively".

Applicants arguments are unpersuasive of any error.

If applicant intends to refer, etc., to specific portions of the specification of the present application, applicant must refer to the present application and not the description of U.S. patent 5,769,034. It is the present application SN. 10/604631, that is being examined, not U.S. 5,769,034.

The examiner does not agree that the specification provides support for the term "freely positioned".

Clearly, being place at a "preselected location" in the heat exchange device (page 29 of the 12/2/04 response) is not the same as being "freely positioned" in the heat exchange device (if it actually did mean the same, it is logical that applicant would have amended the claims so as to remove this issue from contention).

On page 30-32 of the 12/2/04 response, applicant relies on his Fig. 3 as showing that his explosive device can be "freely positioned" anywhere in the heat exchange device.

The examiner disagrees because the actual structure shown in applicants Fig. 3 (which is the only structure present which applicant can rely on), clearly shows that the explosive device cannot be freely positioned anywhere in the heat exchange device.

Said Fig. 3 shows structure 11 of the explosive device as being approximately slightly less than the diameter of the heat exchange device. Using point 33 in Fig. 3 as a fulcrum (as argued by applicant on page 30 of the 12/3/04 response), there are clearly numerous portions of the illustrated heat exchange device 31 which can not be reached by the explosive 101 of the explosive device (for example only, the lower left hand corner of heat exchange device 31 (between the designation "Fig. 3" and the numeral 33 in said Fig. 3, or even any of the areas or portions around opening 32)). These examples show that applicants Fig. 3 and applicants disclosed manner of positioning the explosive device using point 33 as a fulcrum, actually supports the examiners' position that applicants device is not and can not be, "freely positioned" anywhere in the heat exchange device.

Applicants arguments concerning the term "non-destructively" are unpersuasive.

Applicants specification does not use the term "non-destructively" and, it is not at all apparent from the actual claim language, what is actually being referred to. There is no indication at all that this term "non-destructively" means, "not causing destruction to the heat exchanger", as now argued by applicant at the bottom of page 33 of the

Art Unit: 3641

12/2/04 response. Further rendering applicants arguments (re no "destruction at the time of detonation) on said page 33 confusing and unclear is the fact that destruction of any slag or even the heat exchanger wall, would depend upon the actual position of the explosive with respect thereto (e.g. see applicants specification in section 0005). Note the following quote from the examiner in the 10/7/04 interview summary:

"Pointed out that the term "non-destructively" is new matter since clearly the slag is cracked, knocked off or otherwise "destroyed". Further, detonation of the explosive if it is against or very close to the heat exchange device wall could damage or destroy the wall (the spec. on page 1 refers to possible wall damage due to improper positioning of the explosive)".

The examiner does not agree that applicants specification itself provides proper support for the statement "substantially all implosive impact is provided from said at least one explosive material". Applicant, in four pages of argument on this issue, could not point to any specific portion(s) of the specification which provides actual proper support for the statement in question. For example, applicant has not shown that in his invention, the water will all be instantly atomized into a spray, rather than being flung as (essentially solid) volumes of water against the heat exchanger walls with explosive force. Even highly energetic spray (assuming the water was atomized) can cause damage.

Note that it is notoriously well known to utilize high pressure steam and/or water in cleaning, etc. In the instant case, rather than the water and/or atomized water spray being simply under high pressure, it has the force of the explosive itself behind it!

The specification itself does not utilize the statement or term "substantially all explosive impact..." and hence, it does not define what is meant by "substantially all"

Art Unit: 3641

nor, does applicants argument on page 38 of the 12/2/04 response show where the specification itself provides a proper basis for enabling the artisan to determine what all is encompassed by the term "substantially all" (e.g. 99%, 95%, 85%, etc.)

Applicants arguments (e.g. pages 39+ of the 12/2/04 response) re the recitation "at least some coolant" found in claims such as claims 125 and 130, is also unpersuasive.

The phrase "at least some" does not set forth any minimum amount of coolant and, reads on as little as 1% (or even less) of the coolant being delivered to the position of the explosive, however, there is no indication in the specification that such small amounts of coolant would be sufficient nor, is there any indication in the specification of the minimum amount of coolant necessary which the artisan could utilize in determining what is meant by the term "at least some coolant".

Presumably, the amount of coolant needed would also depend on the location in the heat exchange device where it is desired to position the explosive and, the amount of time it takes to deliver the explosive to this location.

As pointed out above, there is no support in the original specification for the term "non-destructively" and there clearly is thus, no support for the new term or phrase, "cooling non-destructively" added to claim 66 in the 12/2/04 response.

4. Claims 66-136 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, for the reasons set forth in section 4 of the 6/3/04 Office action.

Applicants arguments are unpersuasive of any error. Note the discussion in section 3 above re some of the same terms or phrases in issue here, applicants arguments with respect thereto and, the examiner's rebuttal of said arguments.

As already pointed out, applicants disclosure does not define (let alone, even refer to) the terms or phrases in issue. Hence, these terms or phrases render the claims vague, indefinite and incomplete and thus, the metes and bounds of the claims can not be determined.

As even applicants arguments and discussion demonstrates, the terms or phrases in question are open to interpretation in different ways, thus clearly illustrating that the metes and bounds of the claims can not be determined.

It is noted that applicant essentially argues the explosive can be freely positioned anywhere in the heat exchange device, however, the actual claim language is, freely positioned into the heat exchange device.

The terms "anywhere in" and "into", do not mean the same nor, are they interchangeable.

Another indication that the claim language is vague, indefinite and unclear, can be found in the language used in new claims 131-136 and applicants arguments relative thereto (e.g. see pages 45+ of the 12/2/04 response).

It appear from applicants arguments that applicant is interpreting the term "open space" to mean the space inside the heat exchange device 31 in Fig. 3.

However, the actual claim language (e.g. see claims 131-136) refers to using a tubular device freely positioned into the heat exchange device by using a tubular device



Art Unit: 3641

by using a tubular device freely positioned through an open space of the heat exchange device.

It appears that this claim language in claims 131-136 refers instead to the port or heat exchange device wall opening 32 in Fig. 3 which allows the tubular device to be positioned into the heat exchange device 31 by being positioned through the open space 32 of the wall of heat exchange device 31.

This difference in opinion as to the meaning or interpretation of claim language between applicant and the Office is itself, evidence that applicants claim language is vague, indefinite and unclear and, that the metes and bounds of the claims are undefined.

Claims such as claims 131-136 are thus vague, indefinite and incomplete as to what all is meant by and is encompassed by the term or phrase "open space" and, the metes and bounds of the claims are further undefined.

There is also, no proper antecedent basis for the term "open space".

The claims are vague, indefinite and incomplete as to what all is meant by and is encompassed by the term "cooling non-destructively" (note also, the discussion of this term in section 3 above).

There is also, no proper antecedent basis for the term "said cooling non-destructively".

5: Claims 66-136 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, for the reasons set forth in section 5 of the 6/3/04 Office action.

Art Unit: 3641

Applicants arguments are unpersuasive. Note the discussions in sections 3 and 4 above concerning the terms or phrases in issue here.

Since the terms or phrases in issue here, have not been defined or even used in applicants specification, since it cannot be determined which meaning or interpretation is to be applied to each of the terms or phrases in issue here, it is considered clear on its face that applicant has not provided an enabling disclosure showing how to make and/or use, the claimed invention.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3641

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 66-136 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by VBB publication number 5410708 (cited by applicant).

The reference shows the actual claimed steps. It is noted that applicants specification on the bottom of page 1 states that boilers and furnance are heat exchange devices.

Applicants arguments are unpersuasive of any error.

It is immaterial as to whether or not the reference refers to "preconfiguring the furnance" as argued by applicant because applicants claims do not preclude such. It is well settled case law that limitations from the specification (or even from applicants arguments) are not read into the claims. See In re Geuns, 26 USPQ2d 1057.

Applicant on page 57 of the 10/2/04 response, refers to a decision and comments by a technical board in applicants related European case.

While the U.S. Patent and Trademark Office is clearly not bound by any decision by a European technical board in applicants related European case, it is not seen where said board actually made the actual statements attributed to it by applicant.

Said board referred to Figure 4.15.1 of the VBB reference. However, said Fig. 4.15.1 does not show a preconfiguration of the furnance.

Instead, it shows a double jacket cooling device for the explosive (which is the equivalent of applicants cooling jacket 104 and coolant delivery pipe 106!).

Art Unit: 3641

It is considered clear on its face that the cooling jacketed explosive of the reference, has the same flexibility in positioning as applicants cooling jacketed explosive.

9. The terminal disclaimer filed 12/2/04 has been approved.
10. The 1/31/05 IDS (referred to by applicant as a corrected version of the 1/14/05 IDS) refers to and lists, two declarations, but fails to recite the dates these declarations were made available to the public. Such information is necessary for these declarations to be properly listed as published documents on an IDS and, to be considered as such by the Office.

The reference GB 823353 was initially cited in the 9/11/03 IDS but was not considered because no copy was provided. This reference has been added to the 10/7/04 IDS as an acknowledgment that a copy thereof was faxed to the examiner by applicant and that the reference has now been considered.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3641

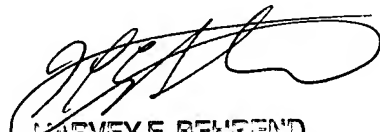
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harvey Behrend whose telephone number is (703) 305-1831. The examiner can normally be reached on Tuesday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-1113.

Behrend/vs  
February 24, 2005



HARVEY E. BEHREND  
PRIMARY EXAMINER